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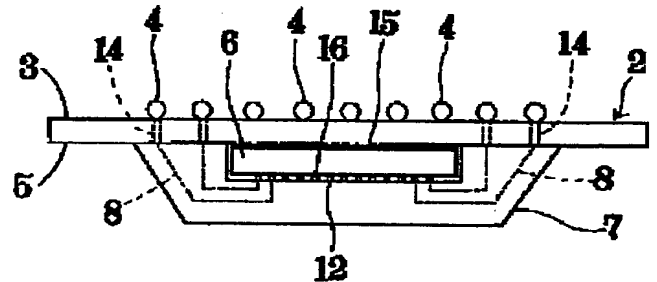
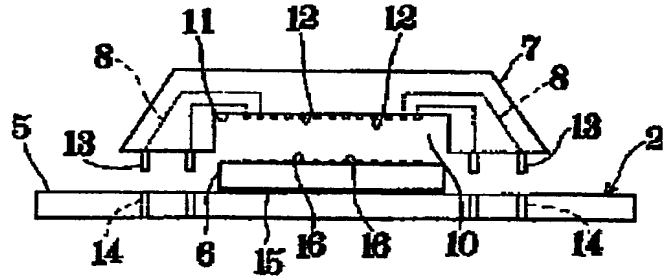
APPLICATION DATE : 10-07-97
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APPLICANT : ROHM CO LTD;

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TITLE : BGA SEMICONDUCTOR PACKAGE
STRUCTURE



ABSTRACT : PROBLEM TO BE SOLVED: To dispense with a wire bonding process and to contrive the simplification of the production process of a BGA semiconductor package structure, by a method wherein a plastic case provided with a built-in wire is made to cover on a chip secured on a substrate in a state the chip is sealed, one end of the wiring is made to have continuity with the chip and the other end of the wiring is made to have continuity with solder balls mounted on the rear of the substrate.

SOLUTION: A plastic case 7 is made to cover on a chip 6, the chip 6 is made to closely adhere to a substrate 2 to pressure-bond conducting needles 12 to bumps 16 formed on the upper surface of the chip 6 and the bumps 16, and the needles 12 are conducted to each other. Then, the substrate 2 is inverted, solder balls 4 covered with a flux are placed on the open parts of fitting holes 14 to fuse the balls 4, and the balls 4 are made to have continuity with conducting terminals 13. As a result, as the chip 6 and the balls 4 are connected with each other via wires 18, a wire bonding process which is hitherto executed, is dispensed with, the connection of the chip 6 with the substrate 2 can be reliably made and the production process of a BGA type semiconductor package structure can be simplified.

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